Construction Industry Institute®

Project Materials Management Primer

Research Summary 7-2

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CII was founded in 1983 to improve the cost effectiveness of the nation's largest industry. The members, who represent a broad cross-section of owners and contractors, believe that many of the problems that limit cost effectiveness are common ones, and that real improvements can be best accomplished in a cooperative environment with the benefits being shared by the construction industry at large.

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INTRODUCTION

Background and Purpose

This primer is a digest of the information contained in the Construction Industry Institute (CII) Special Product, *Project Materials Management Handbook*. The topics discussed are a condensation of 15 of the separate chapters in the *Handbook*. The *Handbook* contains not only the chapters on the subjects in this primer, but also several appendices and checklists. In particular, it contains a postproject evaluation checklist, a guide to contractor selection, a set of definitions, and a bibliography on construction materials management.

The purpose of this publication is to assist owners and contractors (engineering and construction) in using modern materials management systems and techniques which have been proven to be successful. Readers are encouraged to r research the detailed documentation contained both in the *Handbook* and the References.

Importance of Construction Materials Management

Studies by The Business Roundtable Construction Industry Cost Effectiveness (CICE) Project in 1982 and CII in 1985 and 1986 have emphasized the practical value of proper management of materials. These studies have shown that real savings exist in improved labor productivity, reduced surplus, and improved cash flow. Convincing the industry of the necessity for high level attention to materials has not been easy, however, despite the evidence that materials and equipment comprise more than half of the project cost and that the lack of materials is the major cause of project delays.

In a highly competitive market, contractors (particularly small firms) may find it difficult to make the long-term investment commitment required of a modern materials management system. Nevertheless, the long-term benefits are significant. Good management systems are essential to those companies that want to remain competitive in the future.

Attributes of Materials Management

A materials management system includes the major functions of identifying, acquiring, distributing, and disposing of materials needed on a construction project. The logical components of this system are shown in Figure 1. Not shown are the most important functions of planning and controlling the entire system. The more important objectives of materials management are to: